

CLIMATE NEWS

From Sheldon Whitehouse, Barbara Boxer, and Jeff Merkley
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80 Percent of Americans Affected by Weather Disasters

About 80 percent of the U.S. population—about 243 million people—live in counties that have experienced at least one weather-related disaster since 2007, according to a new report from the Environment America Research and Policy Center. The researchers also found that four out of five Americans live in counties that have been declared federal disaster areas

Americans affected by severe and extreme weather, 2007-2012

	(Millions)
Flooding	176
Tropical Cyclones	102
Tornadoes	82
Wildfires	30
Snow and icestorms	111
Drought	63.5*

*As of February 2013

since 2007, and that 49 states have had at least one county declared a federal disaster area. To reach their findings, the researchers examined six years of county-level disaster declaration data from the Federal Emergency Management Agency (FEMA). The report reaffirms scientific research that shows the U.S. is already experiencing greater extremes in precipitation and will likely see an increase in the number of heat waves and severe storms as Earth's climate warms. In 2012 alone, the U.S. experienced its hottest year on record, the worst drought in 50 years, and 11 weather disasters resulting in economic losses of \$1 billion or more, including Hurricane Sandy, which claimed 72 lives and caused more than \$70 billion in damages. (WaPo)

Scientists Project Dramatic Increase in Storm Surges

A new study published in the *Proceedings of the National Academy of Sciences*, found that a one-degree Celsius rise in global air temperatures from 1990 levels would cause the Atlantic coast to experience two to seven times the number of Hurricane Katrina-like storm surges. To reach their conclusions, the researchers studied tide-gauge readings dating back to 1923, which provide an accurate reading of the large storm surges that happen when hurricanes make landfall. The researchers then designed a model to understand how storm surges correlate with air temperatures. The results point to more Katrina-magnitude storm surges as the temperature increases. The scientists' finding is significant because the increase in extreme storms is higher than previous work has predicted. (ClimateWire/pnas.1209980110)

Corporate Executives Renew Push for Climate Action

An increasing number of prominent corporations are seeking bold action on climate change. Last week, 33 well-known companies unveiled a "Climate Declaration" asking for a renewed push for a bipartisan program aimed at stemming greenhouse gas emissions and making the U.S. more resilient against the harmful effects of climate change. The declaration was signed by some of the world's leading brands, including Adidas, eBay, Gap Inc., Ikea, Intel, KB Home, L'Oreal, Levi Strauss, Nestle, Nike, Starbucks, Symantec, and Unilever. The signatories, which represent 475,000 U.S. jobs and \$450 billion in revenues, are calling on Congress to address climate change by promoting clean energy, boosting efficiency, and limiting carbon emissions. "The very foundation of our country is based on fighting for our freedoms and ensuring the health and prosperity of our state, our community, and our families. Today those things are threatened by a changing climate that most scientists agree is being caused by air pollution," the declaration states. "We cannot risk our kids' futures on the false hope that the vast majority of scientists are wrong. But just as America rose to the great challenges of the past and came out stronger than ever, we have to confront this challenge, and we have to win." (ClimateWire)

Climate Change Could Decimate Wine Industry

Research published in the *Proceedings of the National Academy of Sciences* finds that between 19 and 73 percent of the land suitable for grape-growing in various wine-producing areas will cease to be appropriate for wine growing by 2050. The study's authors state that climate change could render well-known wine producing regions unsuitable for wine production, and warn that attempts to shift winemaking to new areas—or mitigate the effects of hotter temperatures in existing areas—could harm the environment. Bordeaux may no longer come from Bordeaux. Oregon's forestland could well become the next Napa Valley, to the detriment of the elk and other flora and fauna that currently rely on the wilderness. Wine grapes are only one example of what will be a much larger trend in land use over the coming decades. Growing seasons and locations for all sorts of crops could change. The researchers argue that wine growers will have to manage that transition to minimize environmental disruptions, using water-conserving technologies to cool grapes or instituting new land management practices. (WaPo/pnas.1210127110)

Sheldon Whitehouse